# Index to Gleanings in Bee Culture

## Volume 91, 1963

In using this index the reader should not fail to note that it is divided into four departments, namely: General, Editorials, Contributors, and Illustrations. The index of General includes everything except Editorials, Illustrations, and Contributors.

## General


### A

ABF convention .....205, .....296, 345, 429
why you should join ..747
Africa, East, commercial beekeeping in .....294
Agriculture extension gets first apiculturist .....599
Alaskan pets, gold banded 720
Aluminum foil, its uses in beekeeping .....281
Apiculture, Chinese .....104
laboratory at Ohio State joined by Thompson and Charlet .....178
research branch confer. 111
who's who in .....288
Armbruster library goes to Cornell .....107
Arthritis and bee venom ..719

### B

Babies are important business .....284
Barrett, Donald P., retires 371
Bears, problem of ..... 20
"Bee boy", Flushing's ....612
Bee business, break through in the .....742
culture awards .....626
department at Skierniewice, Poland .....656
equipment, new, developed .....296
feeder .....596
poison for curing disease .....550
insecticide problems ...682
registration aids disease fight .....740
sanctuaries proposed .. 89
venom and arthritis ....719
yard, from the .....588
Bees, misconception about 732
Beekeeper, sophomore ....652
featured in National advertisement .....746
Beekeepers convention .727
night .....750
Beekeepers, Ohio, meet ..558
Ontario ..... 27
why do they live longer? 592
Beekeeping, a 16-year-old's version of .....340
a wonderful way of life 265
business, how they built it .....144
commercial, in E. Africa 294
commercial, swarm control for .....206
experiences, can't take them with you .....429
experiences in northern Michigan .....745
family ..... 7
for women, why not? .. 76
gleaned over the years 487
hint .....343
in a general farming program .....143
in northern Michigan, more about .....664
introduction to bulletin .237
in Poland .....358
merit badge .....329
oddities in .....460
teenage .....362
uses of aluminum foil in 281
what is it? .....345
what makes success? ..491
Beekeeper, Bill the silent 462
Greenbrier .....457
hobbyist, roll of .....465
Houston, kiddies pied piper .....279
ministerial .....538
open letter to a .....530
Bees, a hot foot for .....475
and bulldozers ..... 43
birds and the .....532
black, don't sell them short ..... 38
don't forget to tell the ..554
enemy to .....476
for Bolivia Peace Corps project .....540
for marginal areas .....426
fountain of the ..... 18
from schools to .....240
gentle, for '63 ..... 16
in glass-sided hives ....395
keep me busy .....365
keeper of the .....599
Ky's. Gubernatorial ....211
McArthur's, find a new home .....410
make their own climate 555
not all bad .....102
package, management of in Ontario .....212
package, producing and shipping .....137
removing from a wall .. 36
saving from insecticides 239
75 years with them ....400
strange experience with 15
transferring from trees 364
Beeswax, premium, production of .....472
Beginner, mark of a .....278
Bee veils, not digestible .. 75
Benzaldehyde for removal of honey .....464
Black widow spider, beware of .....427
Book Reviews
Bee Venom .....277
Hive and the Honeybee 498
Honey is My Hobby ....103
Orange Recipes ..... 19
Queen Rearing .....173
Bulldozers and bees ..... 43
Bulletin, new .....237
B-Z-B Honey Co., joins Sioux Honey Assn. ...436

### C

Check-off plan, participants for 1962 ..... 32
for 1963 .....480
Christmas message, 1963 737
fable .....728
Coding, hive .....280
Colony, and nectar report 560
problem .....347
Comb honey, ignorance of 283
Comb storage, low cost ..724
Combs, black, destroying 216
Commercial beekeeping, swarm control for ...206
Cornell receives Armbruster library .....107
Crops, bigger, supering for 274

### D

Dadant family celebrates 100 years .....167
Disease fight aided by bee registration .....740
Drone, flight time changed 552
Drones, as winter boarders 525
Dunham, Dr. W. E., honored .....283

### E

Entrance, top, a must in Wisconsin .....659
Entrances, open, and exclusion of mice .....597
Equipment, bee, developed 296
Experience, can't take it with you .....429
strange, with bees ..... 15
Extractor, wax .....536

### F

Fair, Florida State & honey show .....311
let's go to the .....484
Minn. state ..... 83
Falls, formula for prevention of .....412
Farrar, Dr. C. L., retires ..589
Field day at Cedara .....336
Food chamber .....545
Foundation, chill it .....492
Fountain of the bees .... 18

### G

Gadgets, patents for ..... 78
Gleanings, excerpt from ..271
Gleanings mail box .....261, .....325, 389
Government cooperates in helping to advertise honey .....722
Grafting, how it's done ..404
Guyton, Prof. F. E., retires 403

### H

Hints, smoker and hive tool, from Scotland ..282
Hive, coding .....280
lifter .....296
scale .....534
Hives, glass sided, bees in spray unit for painting 272
Hobbyist, for the .....526
Holidays, honey .....676
Honey, a cold remedy ....599
and a sweet mess .....344
and pancakes, Lenten menu .....164
as a food and medicine 622
awards announced by USDA .....174
candies, maple .....230
close beside bride ....348
crop '62 announced by USDA .....176
crop, an easy way to sell it .....393
extra special publicity for .....164
false claims about .....219
for Korean children ....100
government cooperates in helping to advertise ..722
has curative qualities ..108
high priced .....402
holidays .....676
idea, aiming high with a 594
is my hobby .....103
market confidence ....228
marketing problems ...346

marriage of, to honey grahams ..... 90
or the bee .....614
production, foreign ....689
production, U. S. .....688
project in Aust. primary school .....647
promote it in good taste 73
recipes, time to try new 100
sales, mean money earned .....420
say "good morning" with it .....228
selling to supermarkets 22
show, international ....590
to scale Mt. Everest ...335
tupelo .....678
U.S., larger European market expected ....726
Honey Plants
alsike clover .....291
blueberry .....547
fireweed .....611
golden cleome .....292
golden ragwort ..... 35
heather .....292
honeydew .....292
maleberry .....483
partridge pea .....227
rhododendron .....418
rosemary .....292
safflower .....183
Simpson's honey plant 99
snowvine .....163
spearmint ..... 35
thyme .....355
wild carrot .....675
yellow sweet clover ....419
Honey Report, Monthly ..5, 69, ..133, 197, 263, 327, 391, ..455, 517, 581, 645, 709
Honeybee, attraction theory .....168
colony, behavior and production in .....430
Honey gate, solution for troubles, ..... 17
Honey pumps ..... 85
Honey queen, Am., Judy Hrushka visits Texas 42

I

Industry contacts .....673
Insecticide, losses eliminated .....621
riddle .....466
Insecticides, saving bees from .....239
International honey show 590
Investment, my best .....220

L

Ladies "Bee" good .....270
Langstroth, memorial bench .....493
Learning from others ....587
Live and Learn .....34, 98, ..162, 226, 290, 354, 417, ..482, 546, 610, 674, 738
Locations, bee, how to get good ones .....333

M

Manipulation changes flight time of drones .....552
Marketing problems of honey .....346
Meetings. ABF 20th .....154
EAS, 9th annual .....600
Ohio .....558
SSBF and ABBA .....628
Texas 81st ..... 44
Merchandising, need for greater caution in ....651
Merit badge, beekeeping 329
Mice, excluded from open entrances .....597
strange bedfellows ....366
Miller, James, a chat with 338
takes Webster's post ...240
Minnesota in 1964 .....469, 659,
Money, how to make it, by trying .....583, 686
Morale builders .....279
Mt. Everest, honey to scale 335
Museum of honey, plans for .....442

N

Nature, mother, tricks of 201
New Year, happy honey .. 47
Nosema, control, recommendations for ..... 88
it can happen to you ..492

O

Obituaries
Barber, O. E. .....303
Burgess, Frank E. .....176
Clausen, S. S. ..... 51
Danielson, D. Alfred ....370
Deiser, Joseph .....564
Engel, Chas. E. Sr. .....499
Gwin, James .....564
Hamilton, Robert .....113
Hampton, Shelby K. ..... 51
Johnson, Ed .....749
Jurash, Stephen .....303
Krebs, Mrs. Ethel .....303
Lesser, Fred W. .....499
Magee, Harry C. .....239
Moser, Rev. Louis .....499
Nelson, Paul A. .....370
Newton, Claire .....436
Sandy, Chas., M.D. .....370
Shadley, Mahlon R. ....564
Smith, Edwin A. .....113
Smock, Roy R. .....749
Stahlman, Emmonds ...113
Stover, Francis Marion 239
Observation hive, bees in 395
Ontario beekeepers ..... 27
northern, managing package bees .....212

P

Package bee dollar .....150
Package bees, managing in northern Ontario ....212
operation import .....528
Packages, producing and shipping .....137
Painting hives, spray unit for .....272
Patents for gadgets ..... 78
Pollination .....548
good, or coincidence ...486
Processing affects honey quality .....422
Producer, a million pound 713
Producing and shipping packages .....137
Promotional program, seven states .....619
Publicity opportunities ...556
Pumps, honey ..... 85

Q

Queen, attacked by attendants, why? .....343
breeding, 40 years of .. 11
two, method .....149
Queens, six-legged harem 470

R

Raspberry area, more about .....557
Recipes from Mrs. Nielsen
Honey, apricot bread pudding .....185
Bavarian creme .....485
butter cookies .....741
buttermilk pancakes ....635
butterscotch sauce .....376
cereal lollipops .....357
cherry buns .....421
crescent rolls .....102
date filling .....229
emerald sundae .....444
fruit .....504
fruit cups .....444
fudge cupcakes .....635
ginger crisps .....293
glazed brioche .....102
marmalade pan bread ..165
nut coffee cake .....549
orange bran cake .....635
orange sauce .....698
peanut bars .....293
peanut butter cookies ..758
prune spiral rolls ..... 37
ring-a-rounds .....229
sauce .....444
topping .....635
Registration, bee, aids disease fight .....740
Report, council .....166
Requeening .....474
Research Review
acarine mite, external in Australia .....349
AFB, eradication in Cyprus ..... 29
in England .....541
treatment in Victoria 541
bee, books needed .....349
poisoning .....413
research in Czechoslovakia .....733
venom .....221
venom, collecting ....221
world index, 1919-'49 349
bees, dancing, technique for studying .....285
beekeeping congress, international .....29, 285
Congress, 19th .....757
in W. Australia .....669
crown vetch .....413
DDT, use of, discontinued in N. Y. .....669
entomological society meetings in Phoenix 93
foreign pests .....477
honey & beeswax trade prices and world sugar market .....541
removing .....603
Isle of Wight Myth ....733
manipulation, effect on foraging bees .....669
marketing agreement, new for Australia ....221
nectar, poisonous to bees .....285
pesticides, report on ...413
pollination of white clover ..... 29
queen rearing, notes on 157
royal jelly, production in Japan ..... 29
seed oils, new .....157
Revell, Irven L., retires ..218
Root, H. H., more about ..492
Rothamsted, a vist to .... 24

S

Sanctuaries for bees proposed ..... 89
Selling honey crop, an easy way .....393
to supermarkets ..... 22
Short course, among friends .....433
Maryland .....301
Silence, not always golden 73
Sioux Honey Assn. and B-Z-B Honey Co. join 436
Smoker and hive tool hints 282
Snelgrove board used with two-queen systems ...666
Spraying, air, protection 252
Spring, eternal city of .. 170
Standardization .....744

Starvation, cause of winter losses ..... 15
State Fair, Minnesota .... 83
Storage affects honey quality .....422
Stephen, W. A., goes to O. 301
Supermarkets, selling to 22
Supering for bigger crops 274
Support price, 1963 .....218
Swarm control, for commercial beekeeping ..206
Swarms, in crazy places 84
reasons for picking up ..428
Swarming, what do we know about it? .... 361

T

Talk to beekeepers .....109, .....171, 234, 297
Texas, annual meeting ... 44
San 'Tone, wives bound for ..... 52
Transfering bees from trees, a method of .....364
Tricks of mother nature ..201
Tupelo honey .....678
Two queen systems and the Snelgrove board .....666
Two queens and laying workers .....685

U

USDA advises honey dealers .....344

V

Ventilation, upward, are we wrong? .....488
Vitex, grows in dry weather 533

W

Wall, removing fees from 36
Washington, our trip to ..545
Water and your health ....609
boiling aids in germination of staghorn sumac ..617
Webster, Marvin, retires ..240
Who's who in apiculture ..288
Winter losses, main cause, starvation ..... 15
Wintering without packing 603

## Illustrations

A

ABF 1963 convention, site of ..... 48
Apiary, among the pines ..457
at Cedara Col. of Agri. ..337
honey producing .....142
Root Co., 50 years ago ..299
triangular shaped .....470
Alaskan homesite .....720
Andrews, Linda, 1963 Honey Queen .....223
presents trophy to winning jockey of the New Boston handicap race 723
receives sample of honey from R. L. Hubbard ..543
with public relations man and Rotary president 722
Apalachicola river .....678
Apiary and extracting house in Argentina .....670

B

Barrett, Don P., honored at Mich. B.A. meeting ..671
Baskets for cappings .....472
Bear damages colonies .. 20
"Beehive", attracts customers at fair ..... 83
Polish, on the heather 653
Beekeeper, sophomore, and 2nd premium "honey-go-round winner ....653
Beekeeping, a manual job 82
short course class of '62 496
Bee feeder .....596
Bee, forager, gives samples of food .....430
foragers at entrance ...432
Bees, colony of, manipulated by students .... 95
fountain of ..... 18
moving .....411
packaged for shipment 137
Bell, Albert G., receives silver beaver award .. 94
Bell, Greg and Dave, inspecting the winter wrap ..655
Bell, Steven H., works for beekeeping merit badge .....330, 331, 332
Bosch, Nelly, inspecting top super of Snelgroved colony .....667
Bottling system .....584, 585
Boyle, Frank, and honey cart .....393
Bradshaw, Ken .....156
Brood, poor ..... 14
Budge, Mrs. Lawrence .... 52
Bullard, Randy, checks his bees .....340, 341
Burgin, Claud, ponders over a gadget ..... 79

C

Cade, Joycelyn Ann, 1st 1963 American Honey Queen .....159
.....March cover
Cedara College of Agri., apiary at .....337
demonstration at .....336
Capping baskets .....472
Cell bars .....408, 409
transferring .....409
Cell finishers .....12, 13
Chandler, John's daughter on super of honey ... 30
Colonies, damaged by bears 20
elevated above flood level .....680
location of, important to bee activity ..... 81
Comb, containing honey, brood and queen cells 236
partially filled by and queen cells ....236
Combs, Gov. Bert of Ky. ..210
Cover Pictures
Jan.—American Honey Queen, Judy Hrushka and Roland Sykes, pres. of Tex. B. A.
Feb.—Italian worker bee on milkweed flowers
Mar.—Joycelyn Ann Cade, '63 Nat. Honey Qn., resigned
Apr.—John Thierman & children installing package bees and queen
May—Dr. Karl von Frisch
Jun.—Spann Leitner, covered with bees .... .... ...
July—Huber Root
Aug.—Pick-up truck for loading honey
Sept.—Hunting for the queen
Oct.—John, Billy, and Beth Meyers, Medina, Ohio
Nov.—Snow covered hives
Dec.—Robin and snow-covered hives
Cox, Leonard, presents winning 4-H bee demonstration .....670
Crane, Dr. Eva, .....155
examines Langstroth diary .....222

D

Dadant, Chas. .....155
Daniels, Merhi, admiring honey skeps .....415
Demonstration, 4-H, presented by L. Cox ....670
Deyell, Jack, receives plaque .....559
Displays, 1960 Nat. Honey Show .....590
of Thomas Doonan ...90, 91
store, go with school lectures ..... 91
Dog, boy's best friend ....380
Doonan, Thomas, displays of .....90, 91
lectures school children 92
Drones, enlarged view of ..525
Dyce, Dr. E. J., ..... 28

E

Edwards, Walter, setting up display .....590
Ellement, Norman, demonstrates queen rearing hive ..... 26
Elliott Jr., Galen .....362
poses by a hive .....363
Entrance, guard, .....597
upward .....488
Exhibit, at Fla. State Fair 311
Midwestern B. A. .....287
Minnesota .....654
Experimental station, main lab. at Rothamsted .. 24
Extracting house and apiary in Argentina .....670
job gets under way at Haefelis' plant .....715
Extracting with 50-fr. extractor .....144
Extractor, loading a 30-frame Radial .....663

F

Farrar, Dr. C. L. .....589
Feeder through inner cover 172
Fountain of the bees ..... 18
Fungicides for spraying apple trees .....682

G

Gallberry blossom .....141
Gibson, Glenn .....154
Grafting needle, well designed .....407
Guyton, Prof. F. E. .....403

H

Haefeli, Ed. Sr., 4th generation beekeeper ...714
John E. .....713
Mrs. John, bookkeeper and saleslady .....718
Hampton, Shelby K. ..... 51
"Hat Hive" displayed at EAS meeting .....602
Haydak, Dr. M. H. helps judge honey entries at fair ..... 83
Henderson, West, and Dr. Townsend ..... 27
Hive body, special .....406
Hive lifter .....296
Hives, coded .....280
used in Poland ...358, 359
Honeybee, Indian and Chinese .....105

XUM

Honeycomb design put to another use .....350
Honey, arranged on shelves in super market ..... 23
being clarified and pumped into storage tanks 147
in barrels .....148
samples, being classified 601
U.S. being examined by Ger. food importers ..734
Honey cart, and F. Boyle..393
Honey Cookery
honey bavarian cream ..485
" cereal lollipops ....357
" cherry buns .....421
" glazed brioche ....101
" goodies for fall festival .....613
" marmalade pan bread .....165
" nut coffee cake ....549
" prune spiral rolls ... 37
" way cookies .....229
" way nook with clever decorations .....293
Norwegian,butter cookies 741
pancake toppings .....677
Honey house, of Wentz Apiaries .....276
new .....146
Honey hut cafe .....521-524
sign advertising cafe ..523
Honey Plants
alsike clover .....291
blueberry .....547
fireweed .....611
incense cedar with honeydew .....739
maleberry .....483
partridge pea .....227
ragwort, golden ..... 35
rosebay (rhododendron) 418
Simpson's honey plant (Figwort) ..... 99
snowvine .....163
thyme .....355
wild carrot .....675
Honey Queens
for 1963 ..... 31
Andrews, Linda, Amer. 223
Cade, Joycelyn Ann and Judy Hrushka .....157
Floyd, Leslie, Minn. ....607
Kroner, Jean Ann, Outagamie Co. .....351
McDonald, Donna, Tex. 44
Pitts, Linda, '64 Tenn. ..735
Powell, Julona Camille, Kansas .....287
Shearon, Carol, '64 Kans. .....734
Smith, Muriel, Wisc. ....351
Holzberlein, J. W. .....151
Hotel Gunter, site of '63 ABF convention ..... 48
Leamington, new .....727
Hrushka, Judy, and Ann Cade .....159
at Texas State Fair .... 42
receives plaque from Mrs. Soder .....158
Hubbard, R. L., presents Linda Andrews with a sample of honey ....543

I

Inner cover with pail of syrup over opening ..172
Institute of Pomology in Poland .....656

J

Jones, Duane, operates uncapping machine at Haefelis' .....715

K

Kung I-fei, of S. E. China, inspects a bee colony 104

L

Langstroth memorial bench .....493
Lectures, school, and displays go together ... 91
to youth, future buyers 92
Lewis, Charles, new president for EAS .....601
Line Drawings
bee with pollen grains on body .....201
flowers showing method of self and cross pollination .....202, 204
gear pump (end view) ...86
honey pump output .... 87
Linten, Geo. and Victor Mesley ..... 28
Loading a 30-frame Radial extractor .....663

M

McDonald, Donna, poses with the Victor family of beekeepers ..... 46
McKinley, Michael Ray, pressing hot wax through strainer .....661
Madonna and child .....728
Mann, Albert R. library entrance .....107
Marshek, Janet Gayle, likes honey .....415
Martin, Linda, with sign used in 4-H demonstration .....543
Martinez, Trinidad, regulates filter press at Haefelis 716
Mellon, Sheraton, receives trophy from American Honey Queen .....723
Meetings
E.A.S. at Ont. Agr. Col. .....600, 601, 602
Mass. assn. members ..478
N. C. assn. members ..286
Ohio beekeepers hold informal meeting ....558
Ohio State, Dr. Rothenbuhler at .....286
Research committee members .....158
Merit badge for beekeeping .....329
Mesley, Victor and Geo. Linten ..... 28
Methyl Bromide, special applicator for .....726
Michigan B. A. honors Don P. Barrett .....671
Miller, Gifford and self-service honey stand ..542
Miller, James S. 240, 338, 339
Mississippi river, source of 469
Morse, Dr. Roger A. examines Langstroth diary 222
Museum of honey, drawing of .....414

N

Nelson, Dr. Bardin, offers suggestions on solving problems ..... 80
Noblett, Dave, checks hives .....470, 471
Nuclei, queen rearing .... 12

O

Observation hive
displayed at EAS gadget show .....606
exposed to too much sun .....399
main attraction at every display ..... 90
my first .....396
novel, enjoyed by beekeeper's daughters ..559
special, used at Rothamsted ..... 25
standard size .....397
Officers of southern tier Association .....479
Osborne, Mark, loading supers .....269
placing covers on hives 267
uncapping combs .....268
using propionic anhydride on covers .....266
Oxford, Mrs. Doris, filling bottles with honey at Haefelis' .....717

P

Package bees .....212
feeding sugar syrup ....214
ready for shipment 458, 459
Packages, cooled by attic fan .....140
loading in truck .....139
ready for shipment ....137
typical parcel post ....140
Pitts, Linda, 1964 Tenn. State Honey Queen ..735
Powell, Prof. W. H. examines Langstroth diary 222
Press, hydraulic, for cappings .....473
Pump, honey, chowing gears ..... 85
Putnal, Thelma, receives merit award .....671

Q

Queen cell, ripe, placed on comb .....138
Queen cells .....10, 14
capped .....298
Queens, honey for 1963.. 31
Andrews, Linda, American .....223
Cade, Ann and Judy Hrushka .....157
Floyd, Leslie, Minn ....607
Kroner, Jean Ann, Outagamie Co. .....351
McDonald, Donna, Tex. 44
Powell, Julona Camille, Kansas .....287
Smith, Muriel, Wis. ....351
Queens, ready for shipment .....141

R

Reed, Gov. John H., receives check from income of the "Gov. hive" ..... 95
Revell, Irven L. .....218
Rice, Lee, with spray unit 272
Root, John, explains operation of candle dipping machine to girl scouts 542
Rothenbuhler, Dr. Walter, at Ohio meeting ....286
Rothamsted, experimental station, main lab. at 24
lady observer records bee visits to artificial flowers ..... 25
queen rearing hive, demonstrated at ..... 26
special observation hive used at ..... 25

S

Schumacher, Hans of BZB Co. .....414
Scouts, girl, sell honey ...594
tour Root Co. .....542
Shearon, Carol, 1964 Kan. State Honey Queen ..734
Sibert, Irving, in his apiary 743
U.S., being examined by Ger. food importers ..734
Shield, Tom, outgoing EAS president .....601
Skulls from mice .....598

Smoker and hive tool from Scotland .....282
Shelgrove board .....666
Spraying apple trees with fungicides .....682
Spraying rig without wheelbarrow type carrier ..273
with carrier .....313
Staghorn sumac .....617
Stahlman, Millard, in national advertisement ..735
Stanger, Ward, first apiculturist for Ag. Ext. ....599
Stephen, W. A. .....301
Storage area .....147
Strainer for hot wax .....661
Students, course in beekeeping ....647, 648, 649
Supers arriving at Haefelis' extracting and packing plant .....714
Surmach, Myron, with hinged hive .....222
Swarm, hiving a ....168, 169
inside a well ..... 84
on bee veil .....463
on pear tree .....479
Swarm box, arrangement of frames .....405-407
Swarm control manipulations .....207-209
Sykes, Ronald, receives plaque from John Milum .....159

T

Tampers, wax, two .....662
Tanks, sketches of .....662
Thierman, John, and family receive package bees by mail ..... 7
installing package bees .....April cover
results of beekeeping after two summers .. 9
Thierman, Susan Mary, with swarm she helped hive 8
Tiu, Ginny, accepts honey from Wis. honey queen .....351
Townsend, Dr. Gordon, explains school's beekeeping program .... 27
Trostle, Mrs., working with new candy recipe ....230

U

U. S. food exhibit in Brussels, draws crowds .. 94

V

Vanderhider, J. H., with honey display stand ..334
Victor Jr., W. O. and Mrs., display honey .....521

W

Wax extractor, a simple ..536
parts of .....537
Wax, hot, strainer .....661
Wax tampers, two .....662
White, Dr. J. W., USDA head chats with officers of the SSBF ..... 30,
White, Gordon, presents merit award to Mrs. Thelma Putnal .....671

Z

Zmarlicki, Cyprian .....359
with wife and J. Happ 350

## Contributors

A

Abbas, A. R. ..... 15
American Medical Assn. ..609
Anderson, Edwin J. .....230
Anderson. H. L. ..... 84
Andrews, Dorothy M. ..... 76
Applegate, Jr., R. A. .....561
Arkansas Beekeeping .....102
Ashman, Benjamin H. .....599
Australasian Beekeeper ...100
Avery, Inda .....530

B

Barnes, Paul M. .....685
Barnes, Ralph W. .....472
Barth, Ray .....713
Bell, Albert G. .....83, 652
Bell, Steven H. .....329, 548
Blanchard, O. K. .....651
Bosch, Klaas .....212, 666
Boyle, Frank C. .....393
Britton, Mary Louise .....525
Bruce, Charles L. .....282
Buchanan, John .....558
Bullard, Randy .....340
Bunch, F. Q. .....205, 296, 345, 429, 469, 526, .....659, 727, 750
Burge, C. J. .....647
Burr, Leslie .....283

C

Chandler, John ..... 20
Choroszewski, Alfons E. .. 75
Christians, Geo. W. .....599
Comunale, Dr. Anthony R. 366
Coursen, Angeline .....720
Curtis, Roy C. .....220

D

Daughenbaugh, Mrs. Beth 270
Davis, Ronald E. .....281
Davis, W. K. .....345, 428
Decker, Beryl .....240
Des Moines Tribune .....344
Deyell, M. J. .....109, .....171, 234, 297, 492, .....557, 664, 745
Doonan, Thomas .....90, 470
Dyce, Dr. E. J. .....107

E

Echols, Talmadge D. .....402
Edmunds, J. W. .....492
Elliott, Jr., Galen .....362
Entz, David J. .....108

F

Farm & Ranch News .....599
Fikel, Stanley C. .....476
Finding, A. L. .....343
Fitzgerald, David L. ..343, 732
Fox, E. d. .....279, 433, 527
Fraser, H. M. .....294
Fretz, Herbert J. .....271
Fu-Jen, Chih .....104

G

Gibson, Glenn .....545, 673
Goodwin, Neil .....336
Gouget, Charles W. .....201
Grace, Harriett M. ..... 47, ..100, 164, 228, 284, 348, ..420, 484, 556, 676, 737
Gunn, Sherman .....280

H

Happ, Ann, .....728
Jack ..... 5, 69, 133, 197, 261, 263, 325, 327, 389, 391, 455, 517, 545, 581, 645, 709
Happy Motoring News ....279
Heisey, H. Orville .....168
Herberger, James P. .....540
Hinckley, Chas. E. .....346
Hitchcock, J. D. .....218
Holmes, Francis O. ...18, 617
Holterman, Glen .....487
Holzberlein, J. W. .....150
Hoosier, Mrs. B. .....614
Hunter, Beatrice Trum ....277
Hutchins, Edward F. .....597

J

Jarvis, Harry E. .....744
Jesper, D. M., F.R.E.S. ....528
Joint U.S. and Canadian Nosema Disease Committee ..... 88
Jones, Leslie .....491
Joubert, Julian, K.B.B. ....488

K

Kalthoff, Carl ..... 22
Karnow, Michael, Jr. 583, 686
Kennerly, A. B. ..... 44, 78, 333, 521
Klaassen, Irvin .....228
Knepp, Thomas H. ...395, 536
Kruse, F. A. .....296, 596

L

Laird, Cubie R. .....678
Lane, Roger C. .....603
Little, L. H. .....10, 32, 480
Lovell, Dr. Harvey B. ..35, 99, ..163, 227, 291, 355, 418, ..483, 547, 611, 675, 739

M

Mac Donald, Jon E. ..... 85
Mac Elwaine, Harrison ...554
McGrane, J. B. .....555
McKibben, Gerald .....364
McKinley, Wm. .....16, 73, 216, 404, 427, 466, ..475, 492, 660, 724
Mead, Robt. M. .....426
Mitchinson, Rev. Francis ..538
Morris, Harry J. .....587
Morse, Dr. Roger A. ....29, 93, .....157, 221, 285, 349, .....361, 413, 477, 541, .....605, 669, 733
Mraz, Charles .....206
Mumford, Cdr. E. R. ..... 38

N

Neill, I. L. ..... 89
Nielsen, Mrs. Benj. 37, 101, ..165, 229, 293, 357, 421, ..485, 549, 613, 677, 741

P

Palmer, Stanley .....534
Papanek, Paul M. .....682
Patricia, Sister Jane, CSJB 278
Potter, John E. .....486
Propolis Pete .....34, 98, ..162, 226, 290, 354, 417, ..482, 546, 610, 674, 738

R

Rahmlow, Henry J. .....144, 265, 311
Rice, Lee .....272
Robbins, Joe .....465
Root, John ..... 24
Root, Huber .....167
Rothenbuhler, Walter C. ..283

S

Sauriol, Charles .....410
Schiwek, G. Karl .....474
Scholze, Otto .....659
Schweisheimer, Dr. W. ....550 .....592, 622
"Seventeen" .....612
Sibert, Irving .....742
Sibert, John .....365

Sloan, Eugene B. .....457
Slone, Earl .....588
Smith, H. Gordon ...149, 347
Smith, W. D. .....170
Soder, Mrs. Carl L. ....42, 722
Steinbauer, Edward M. ...429
Subers, Kushnir & White 422
Sykes, Roland T. .....594

T

Taber, Stephen III .....552
Telschow, Gustave .....719
Thierman, Sue McClelland 7, .....211
Thurston, Leta .....532
Townsend, G. F. .....464

V

Varney, Edmund .....747

W

Wayte, L. A. ..... 43
Weaver, Roy S. .....400
Wentz, R. A. .....274
White, Lew W. .....533
Wisconsin Experimental Sta. Press Release ..296
Wittekindt, Dr. Wolfgang W. .....430
Woodruff, Curtis L. .....460
Wulff, Ronald .....143
Wyndham, Robt. J. ..... 17, 36, 239, 462, 621.....

Y

York, Jr., H. F. .....137

Z

Zmarlicki, Cyprian ..358, 656

## Editorials

A

ABF convention, get reservations early ....416
join the .....734
Advertising, did you take advantage of it? .....608
AFB controlled with antibiotic patties ....353
Antibiotic patties control AFB .....353
new, control EFB .....353

B

Beekeeper's diary .....734
Beekeepers need gentle bees ..... 97
Beekeeping in rehabilitation .....353
Bee feed, beware of cheap sugar .....544
Bee industry, needs simplification and standardization .....224
Bee inspectors, hats off to 672
bee venom therapy, more information needed 544
Bees and the weather ....225
chilled, do they die? ... 96
colonies of, on the increase .....544
gentle, for beekeepers .. 97
package, maximum returns from .....225

C

Check-off plan, results are encouraging .....160
Christmas, what does it mean to you? .....734
Colonies, multiple queen of bees on the increase 544
protect them from insecticides .....416

E

EFB, new antibiotic control for .....353

F

Fair time, September is ..544

H

Haydak, Dr. M. H., made full professor .....608
Hives, snow covered ..... 96
Honey, are you proud of it? .....608
jars, 5-lb. disappearing 734
prices, check before selling .....672
show, national .....734
Honey comb uncapper ...544

I

Insecticides, protect colonies from .....416
Inspectors, bee, hats off to 672

M

Management, faulty, cause of winter losses .....160

N

Newspaper articles needed 353

P

Package bees, maximum returns from .....225

Q

Queen colonies, multiple ..161

S

Sanitation requirements, plant, for USDA fruit and veg. purchases ..352
Secretaries, association, deserve credit .....353
Sugar .....416
cheap, beware of .....544
price jumps .....224
prices .....672

T

Truck, check classification of .....608

U

Uncapper, honey comb, new .....544

W

Weather, about the .....161
and what about bees: ..225
Weather, about the .....161
severe in Britain .....352

XUM

W.
..430
..460
..143
.. 17,
.....
...137
8, 656
led 353
m
...225
e ..161
s,
uit
s ..352
,
....353
....416
....541
....224
....672
tion
....608
,
....544
....161
s: ..225
....161
....352

XUM